



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/777,414
Applicant : Alberto Menache and Mark Sturza
Filed : 02-11-04
Art Unit : Unassigned
Examiner : Unassigned
Title : RADIO FREQUENCY MOTION TRACKING SYSTEM AND
METHOD

Docket No.: : MENAH-66588
Customer No. : 24201

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the duty of disclosure and 37 C.F.R. § 1.97(b), enclosed is Form PTO/SB/08 listing art which may be material to patentability of the invention. Copies of the cited foreign patent documents and non-patent literature documents are enclosed.

Applicant also brings to the examiner's attention the International Search Report from International Application No. PCT/US03/07514, which corresponds to U.S. Patent Application Serial No. 10/386,586, which is the parent of this continuation-in-part application. That International Search Report lists as "Y" documents (documents of particular relevance when combined with one or more other such documents) the following U.S. patents: 5,317,394 and 5,363,297. A copy of the International Search Report is enclosed. The International Search Report is not listed separately as a document on Form PTO/SB/08.

It is believed that these references will be helpful during examination of the application, and it is believed that no fee is due in connection with this paper. However, should a fee be



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/777,414	
	Filing Date	02-11-04	
	First Named Inventor	Alberto Menache	
	Group Art Unit	Unassigned	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	MENAH-66588

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	JOEL D. VOELZKE (Reg. No. 37,957)
Signature	
Date	February 27, 2004

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Typed or printed name	JOEL D. VOELZKE		
Signature		Date	February 27, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Docket No. MENAH-66588

required, the Commissioner is authorized to charge any fee due in connection with this matter to Deposit Account No. 06 2425. A duplicate copy of this paper is enclosed.

DATED: February 27, 2004

Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By: 
Joel D. Voelzke
Attorneys for Applicant

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
Application Number		10/777,414				
Filing Date		02-11-04				
First Named Inventor		Alberto Menache				
Art Unit		Unassigned				
Examiner Name		Unassigned				
Attorney Docket Number		MENAH-66588				
Sheet	2	of	4			

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US-	6,127,672	10/03/2000	Danisch	
		US-	6,148,280	11/14/2000	Kramer	
		US-	6,157,592	12/05/2000	Kriz, et al.	
		US-	6,172,499	01/09/2001	Ashe	
		US-	6,176,837	01/23/2001	Foxlin	
		US-	6,181,371	01/30/2001	Macquire, Jr.	
		US-	6,204,813	03/20/2001	Wadell, et al.	
		US-	6,269,172	07/31/2001	Rehg, et al.	
		US-	6,272,231	08/07/2001	Mauer, et al.	
		US-	6,288,785	09/11/2001	Frantz, et al.	
		US-	6,324,296	11/27/2001	McSheery, et al.	
		US-	6,369,564	04/09/2002	Khalfin	
		US-	6,380,894 B1	04/30/2002	Boyd et al	
		US-	6,400,139	06/04/2002	Khalfin, et al.	
		US-	6,409,687	06/25/2002	Foxlin	
		US-	6,428,490	08/06/2002	Kramer, et al.	
		US-	6,549,004	04/15/2003	Prigge	
		US-	6,563,107	05/13/2003	Danisch, et al.	
		US-	6,567,116	05/20/2003	Aman, et al.	
		US-	6,580,811	06/17/2003	Mauer, et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind ⁵ (if known)				
		JP	2001-26551		09/28/2001	Hitachi Kokusai Electric Inc		
		CA	2405048		11/01/2001	Inspeck Inc.		
		JP	2001-21548		08/10/2001			

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/777,414
Filing Date	02-11-04
First Named Inventor	Alberto Menache
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MENAH-66588

U.S. PATENT DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		US- 4,660,039		04/21/1987	Barricks, et al.	
		US- 5,056,106		10/08/1991	Wang, et al.	
		US- 5,317,394	A	05/31/1994	Hale et al.	
		US- 5,363,297	A	11/08/1994	Larson, et al.	
		US- 5,438,321		08/01/1995	Bernard, et al.	
		US- 5,450,070		09/12/1995	Mussar, et al.	
		US- 5,458,123		10/17/1995	Unger	
		US- 5,513,854		05/07/1996	Daver	
		US- 5,581,257		12/03/1996	Greene, et al.	
		US- 5,583,517		12/10/1996	Yokev, et al.	
		US- 5,729,475		03/17/1998	Romanik, Jr.	
		US- 5,802,220		09/01/1998	Black, et al.	
		US- 5,831,260		11/03/1998	Hansen	
		US- 5,884,239		03/16/1999	Romanik, Jr.	
		US- 6,005,548		12/21/1999	Latpov, et al.	
		US- 6,050,962		04/18/2000	Kramer, et al.	
		US- 6,070,269		06/06/2000	Tardif, et al.	
		US- 6,095,928		08/01/2000	Goszyk	
		US- 6,104,379		08/15/2000	Petrich, et al.	
		US- 6,115,052		09/05/2000	Freeman, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind ⁵ (if known)				
		JP	10-7429		03/17/1998	Japan Radio Co. Ltd.		
		JP	10-222668		08/21/1998	Syst Skomu:KK		
		WO	98/41815		09/24/1998	Canadian Space Agency		
		JP	10-261090		09/29/1998	Tokyo Electric Power Co. Inc		
		WO	98/47426		10/29/1998	Virtual Technologies, Inc.		
		WO	99/53443		10/21/1999	Elagin et al.		
		JP	2000-146509		05/26/2000	Agency of Ind Science		
		JP	2000-231638		08/22/2000	Namco Ltd.		
		WO	01/09861		02/08/2001	Fulcher		
		WO	01/35208		05/17/2001	Hwang		

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Application Number	10/777,414
Filing Date	02-11-04
First Named Inventor	Alberto Menache
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MENAH-66588

[illegible][illegible]Date Considered

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/777,414
			Filing Date	02-11-04
			First Named Inventor	Alberto Menache
			Group Art Unit	Unassigned
			Examiner Name	Unassigned
			Attorney Docket Number	MENAH-66588
Sheet	4	of	4	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	X	REYNOLDS MATTHEW; "A Phase Measurement Radio Positioning System for Indoor Use"; MIT; February 3, 1999	
	X	LANCASTER, DON; "Tech Musings"; Number 135; April 1999.	
	X	HIGHTOWER, JEFFREY, et al; "SpotON" An Indoor 3D Location Sensing Technology Based on RF Signal Strength"; UW CSE Technical Report #2000-02-02; February 18, 2000	
	X	HIGHTOWER, JEFFREY and GAETANO BORRIELLO; "Location Systems for Ubiquitous Computing"; IEEE Computer Magazine; August 2001.	
		FOXLIN, ERIC; "Motion Tracking Requirements and Technologies"; Extended draft versino of Chapter 8 in Handbood of Virtual Environment Technology; Kay Stanney, Ed.; Lawrence Erlbaum Associates; 2002	
	X	KITASUKA, TERUKAI, et al.; "Location Estimation System Using Wireless Ad-Hoc Network"; 2002.	
		TRAKUS, INC.; Various pages from http://www.trakus.com ; displaying "Copyright 2002" and printed on December 16, 2003.	
		MENACHE, ALBERTO, "Understanding Motion Capture for Computer Animation and Video Games" Academic Press 2000 (pp. vii-ix, xiii-xiv, 1-2, 14-37, 205-206)	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.